

Franklin H. Branin, Jr.

Data Systems Division, Development Laboratory, Poughkeepsie, New York.

Physical chemistry (Ph.D., Princeton University, 1950). Before joining IBM in 1957, for seven years at Radio Corporation of America, The Naval Ordnance Laboratory, Los Alamos Scientific Laboratory, and Shell Development Laboratory. Participated in programs involving computer methods for network analysis, matrix computation, and numerical solutions of differential equations. Currently an advisory programmer for problem-oriented programming.

Jack E. Bresenham

General Products Division, Development Laboratory, San Jose, California.

Electrical and industrial engineering (Ph.D., Stanford University, 1964). Joined IBM in 1960. IBM resident graduate scholar 1962 to 1964. Presently a senior programmer at the computation center in San Jose.

Robert M. Carlitz

Currently physics student at Duke University. Since 1962 has been with IBM Development Laboratory, Poughkeepsie, New York, during academic vacations.

Tien Chi Chen

Data Systems Division, Development Laboratory, Poughkeepsie, New York.

Physics (Ph.D., Duke University, 1957). With IBM since 1956 in numerical analysis, molecular quantum theory, optimal programming and machine design areas. Currently directing a problem-oriented programming group.

M. Gerson Ginzberg

Data Processing Division, Special Systems, Ossining, New York.

Mechanical and electrical engineering, applied mechanics (M.S., University of Cincinnati, 1958). Engaged in stress analysis and propeller aerodynamics prior to joining IBM in 1959. Extensive work in programming design for airline reservation systems. Currently senior industry analyst in market requirements.

Leonard H. Haines

Corporate Headquarters, Systems Research and Development, Cambridge, Massachusetts.

Mathematics (M.A., University of California, 1960). Joined IBM in 1957. IBM resident graduate scholar 1963-64. Designed the 1401 FORTRAN compiler. Currently engaged in programming research.

Loren V. Hall

Data Systems Division, Development Laboratory, Poughkeepsie, New York.

Mathematics (M.S., New York University, 1963). Problem-oriented programming since joining IBM in 1963. Engaged in programming of matrix, number theoretic, and statistical problems.

Authors

Saul Shapiro

Advanced Systems Development Division, Systems Methodology and Programming Laboratory, Mohansic, New York.

Chemical and electrical engineering (M.S., Columbia University, 1959). Worked on control systems, and hybrid computation after joining IBM in 1959. IBM resident graduate scholar 1963-64. Presently a staff engineer, designing control systems for manufacturing processes.

Julian Suez

Data Systems Division, Development Laboratory, Poughkeepsie, New York.

Mechanical engineering (M.S., Massachusetts Institute of Technology, 1962). Machine evaluation and matrix algebra programming since joining IBM in 1962. Currently member of a problem-oriented programming group.

Dora W. Sweeney

Field Engineering Division, White Plains, New York.

Mathematics and industrial management (M.S., Massachusetts Institute of Technology, 1963). Mathematical analysis and computer programming at Los Alamos Scientific Laboratory for eight years prior to joining IBM in 1954. Coordinated project STRETCH and was engineering manager of the 7094. Advanced programming systems design for SYSTEM/360. Presently directing field engineering education.

Peter D. Welch

Research Division, Thomas J. Watson Research Center, Yorktown Heights, New York.

Mathematics, physics and mathematical statistics (Ph.D., Columbia University, 1963). Supervised project on reduction and analysis of radar terrain return data at the Physical Science Laboratory of New Mexico State University from 1951 to 1956. With IBM since 1956, currently working in applied probability and statistics areas.